



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,600	09/10/2001	Ludo Adriaensen	016782-0230	6512
22428	7590	12/01/2004		
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER	
			GRAY, JILL M	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

S. C

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/857,600	ADRIAENSEN ET AL.
	Examiner	Art Unit
	Jill M. Gray	1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 20 August 2004.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 20,22,23,25-32,34 and 39 is/are rejected.
- 7) Claim(s) 21,24,33 and 35-38 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Amendment***

The rejection of claims 20-21, 23, 25-26 and 37-39 under 35 U.S.C. 103(a) as being unpatentable over Minamida et al, 5,575,866 in view of Creps 4,358,887 is withdrawn in view of applicants' arguments.

The rejection of claims 22, 24, 27-28, 34 and 36 under 35 U.S.C. 103(a) as being unpatentable over Minamida et al, 5,575,866 in view of Creps 4,358,887, further in view of Kotera et al, 4,340,519 is withdrawn in view of applicants' arguments.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-26, 29-30, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takazawa et al, 4,774,105 (Takazawa) in view of Hiromori et al, 4,791,025 (Hiromori), Kotera et al, 4,340,519 (Kotera), Creps, 4,358,887, Pennisi, "Hot Dip Galvanizing" and "Hardware" product sheets wherein Creps, Pennisi and "Hardware" are cited to show the state of the art.

Takazawa teaches a metal article comprising a core covered with an intermediate coating layer and a synthetic resin coated thereupon. The core can be a steel wire, the intermediate coating layer is a metallic coating and the synthetic resin is polyester which can be used in the form of a powder, film or paint, essentially as

claimed by applicants in claims 25 and 26. See column 2, lines 30-32. In addition, the metallic coating can be a metal of the type set forth by applicants in claim 30. See column 2, lines 15-27. Takazawa is silent as to a drawn wire.

Hiromori teaches a stainless steel wire comprising a steel wire covered with an intermediate coating layer and a paint resin applied thereto. The paint resin can be polyester and can have an organic or inorganic coloring agent added, as required by claims 25, 26, 29, and 30. See column 1, lines 60-63 and column 2, lines 3-28. In addition, Hiromori teaches that the painted steel wire is drawn to obtain a uniform wire diameter. See column 2, lines 29-31. Accordingly, Hiromori teaches a drawn wire.

Pennisi is cited for its teaching of hot dip galvanizing on steel and that the zinc coating results in a bright shiny surface. See pages 3 and 6. The Hardware product sheets are cited to show that it is known in the art for zinc coated steel to have a bright shiny surface.

While silent as to a drawn wire, the teachings of Hiromori would have provided motivation to the skilled artisan to subject the wire of Takazawa to drawing in order to obtain a uniform wire diameter. The fact that Hiromori teaches drawing his wire after baking the paint resin is of no moment to the resultant product, namely, a drawn wire having a steel core covered with an intermediate coating layer and a polyester coating immediately upon said intermediate coating layer, as required by claim 25. It should be noted that the polyester of Takazawa is not limited to "colored polyester". Rather the skilled artisan would reasonably presume that that said polyester is transparent because Takazawa is concerned with enhanced anticorrosion treatment of metal

articles and not necessarily the production of colored metal articles. Nonetheless, Kotera teaches a polyester resin suitable for coating on zinc plated steel. This polyester can be polyethylene terephthalate comprising pigments such as titanium oxide or other coloring agents and result in a coating that has excellent anticorrosion properties and can be transparent. It would have been an obvious expedient to the skilled artisan at the time the invention was made, to use as the polyester of Takazawa, a polyester known in the art as being suitable for zinc plated steel articles and having excellent anticorrosion properties and transparency, such as the polyester taught by Kotera. Furthermore, as set forth above, the presumption is that the polyester of Takazawa is transparent and the addition or elimination of a coloring agent is not construed to be a matter of invention, in the absence of clear factual evidence of unexpected or superior properties directly related to the transparency of the polyester resin or the addition of a coloring agent.

Regarding the teachings of Hiromori, Hiromori is relied upon for all that he would have reasonably conveyed to one of ordinary skill in the art at the time the invention was made, namely, that drawn metal plated steel wire having a polyester coated thereon was known in the art at the time the invention was made.

As to the intermediate layer having a bright looking surface, Takazawa teaches that his steel substrate can be plated with molten zinc, e.g. galvanized. It is well known in the art that galvanized steel results in a shiny, glossy, bright surface. See Creps, column 1, line 58 and column 2, lines 13-14 and Pennisi, pages 1, 3 and 6, and "Hardware" which references steel products with bright zinc finish. Accordingly, the

examiner has reason to believe that the plated articles of Takazawa have a bright surface, particularly in the absence of clear factual evidence to the contrary.

Therefore, the combined teachings of Takazawa, Hiromori, Kotera, Pennisi, Creps and "Hardware" would have rendered obvious the invention as claimed in present claims 25-26, 29-30, and 39.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20, 22, 23, 24, 32 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, in claims 20, 23 and 32 the language of "giving a degree of brightness to said intermediate coating" is vague. It is not clear as to how the steel core is given a degree of brightness and it is not clear as to what constitutes "a degree of brightness". There is no standard or baseline with which to determine the degree of brightness by. Also, in (d) the language of "using a transparent thermoplastic polyester" is vague and indefinite because there are no clear process steps associated with this use of transparent thermoplastic polyester.

Claims 22 and 34 are indefinite because there are no clear method steps directly defining how the polyester is colored. In particular, the language of "coloring said polyester" is vague. This language encompasses adding a pigment to the polymer as

well as adding a pigmented film layer to the coated steel wire. Accordingly, the metes and bounds for which patent protection is being sought are not clear.

***Response to Arguments***

Applicant's arguments with respect to claims 25-31 and 39 have been considered but are moot in view of the new ground(s) of rejection.

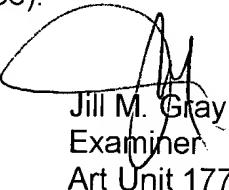
***Allowable Subject Matter***

Claims 21, 24, 33, 35, 36, and 37-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray  
Examiner  
Art Unit 1774

jmg